

# Robust Electric Aerial Instrument Platform for Volcanic Environments, Phase I

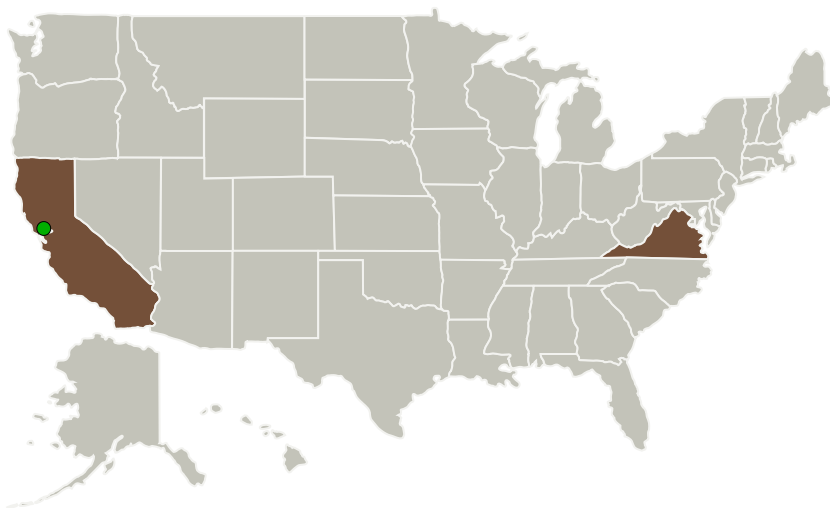
Completed Technology Project (2011 - 2011)



## Project Introduction

The innovation proposed for research, and evaluation, and maturation is that of a new class of small Unmanned Air Systems (UAS) with increased payload capability, which may be well suited for use as an aerial payload platform in harsh, remote environments. In specific, the innovation proposed is the use of a hybrid structure in an electric man-portable UAS for scientific use. The fabrication techniques to be investigated in Phase 1 will also lead to a unique and repeatable lean airframe manufacturing process.

## Primary U.S. Work Locations and Key Partners



Robust Electric Aerial  
Instrument Platform for Volcanic  
Environments, Phase I

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Organizations Performing Work	Role	Type	Location
Vanilla Aircraft, LLC	Lead Organization	Industry	Falls Church, Virginia
● Ames Research Center(ARC)	Supporting Organization	NASA Center	Moffett Field, California

## Primary U.S. Work Locations

California	Virginia
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## Project Transitions



**February 2011:** Project Start



**September 2011:** Closed out

### Closeout Documentation:

- Final Summary Chart(<https://techport.nasa.gov/file/138468>)

## Organizational Responsibility

### Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

### Lead Organization:

Vanilla Aircraft, LLC

### Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

## Project Management

### Program Director:

Jason L Kessler

### Program Manager:

Carlos Torrez

### Principal Investigator:

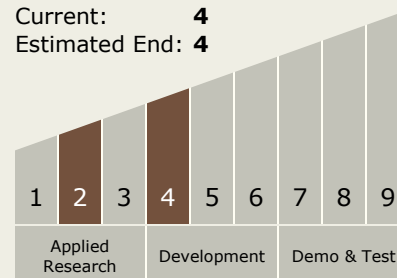
Neil Boertlein

## Technology Maturity (TRL)

Start: 2

Current: 4

Estimated End: 4



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## Technology Areas

### Primary:

- TX16 Air Traffic Management and Range Tracking Systems
  - └ TX16.1 Safe All Vehicle Access

## Target Destinations

The Moon, Mars, Outside the Solar System, The Sun, Earth, Others Inside the Solar System